

## **AMENDMENTS TO THE CLAIMS**

1. (Currently Amended) A photolithographic reduction projection catadioptric objective with a beam path, comprising: a first optical group (G1) including an even number of at least six mirrors (M1-M6); and a second at least substantially dioptric optical group (G2) more imageward than said first optical group including a number of lenses (E4-E13), and wherein said first optical group (G1) provides compensative axial colour correction for said second optical group (G2), wherein the a virtual image is formed by said first optical group physically behind a sixth mirror (M6).
2. (Original) The objective of Claim 1, wherein said image is formed with a numerical aperture of at least substantially 0.65.
3. (Canceled)
4. (Currently Amended) The objective of Claim 1, wherein said at least four mirrors (M1-M6) of said first optical group (G1) include a convex mirror (M6) arranged most imageward in the beam path of the objective, and wherein said second optical group (G2) receives a beam from said convex mirror (M6).
5. (Currently Amended) The objective of Claim 1, wherein optical surfaces of each minor M1-M6 of said objective are at least sections of surfaces of revolution each having a common axis (A) of symmetry.









plurality of lenses is at least half of a diameter of said each lens (E4-E13).

27. (Original) The objective of Claim 11, wherein said objective is doubly telecentric.
28. (Currently Amended) The objective of Claim 11, wherein optical paths of projected rays are redirected at each lens element ~~(E4-E13)~~ of said second optical group at an angle of less than substantially 20°.
29. (Original) The objective of Claim 11, wherein said image is formed with a numerical aperture of at least substantially 0.70.
30. (Original) The objective of Claims 11, wherein said image is formed with a numerical aperture of at least substantially 0.75.